



MANUFACTURER OF FERROUS AND NON FERROUS INVESTMENT CASTING
FABRICANTE DE FUNDICIÓN POR INVERSIÓN FERROSOS Y NO FERROSOS
HERSTELLER VON EISEN- UND NICHTEISEN-FEINGUSS
PRODUTTORE DI FUSIONI FERROSE E NON FERROSE

THE COMPANY

ICAST ALLOYS LLP was founded to be a different kind of company from day one. The unsurpassed customer loyalty we enjoy confirms our corporate philosophy, not to mention the strong sales and profitability growth we have witnessed in our history.

Customers always choose ICAST for the high quality and the reliability of our products and services for Investment Casting. But those who go beyond - to get to know us beyond our service offerings - choose ICAST for our philosophy because it works for them.

- ◆ **Our corporate commitment to integrity gives our staff the courage to do what is right, not expedient.**
- ◆ **The pursuit of excellence creates an energized, innovative climate.**
- ◆ **Intelligent solutions are identified every day, by people thriving on ICAST's unique corporate culture**

Customer success—a notion that stretches beyond "customer satisfaction"— is the ultimate result of all of the above

VISION

To produce high-quality, cost effective castings through high technology

MISSION

Build the best casting products, use business and technology to inspire and implement solutions to exceed customer's expectations

ADVANTAGES

- ◆ **Wide Alloys Selection**
- ◆ **Design Capabilities**
- ◆ **On Time Delivery**
- ◆ **Customer Focused**
- ◆ **Cost Effective**
- ◆ **Fast Turnaround**

CORE COMPETENCE

- ◆ **Flexible order volume ranging from few KGS to tons**
- ◆ **Consistent quality**
- ◆ **Prompt response to inquiries and RFQS**
- ◆ **Dedicated staff for bulk orders**
- ◆ **Qualified and Skilled workforce**
- ◆ **3D Designing and Reverse Engineering**





**INDIGENOUSLY DESIGNED AND
DEVELOPED MOST INNOVATIVE
AND FLEXIBLE ROBOTIC
CONVEYOR SYSTEM**

Robot make : **ABB (Sweden)**

Details : **6-Axis IRB 6700 Model (7th Gen)**

Pay-Load Capacity : **205Kgs** || Reach : **2.80 metres**

Mean time between failures : **400,000 hrs**

No. of Conveyers : **5**

MAX SHELL HANDLING CAPACITY AT A TIME : **400 SHELLS**

Max Casting Dimensions Range : **600 x 600 x 650 (mm), 23.62 x 23.62 x 25.60 (inches)**

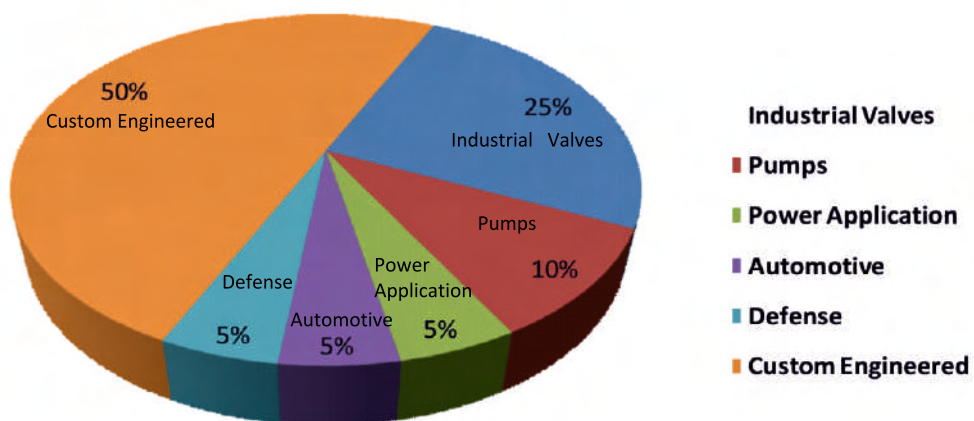
Min Max Casting Weight Range : **15 grams to 85 Kilograms 0.033 lbs to 185 lbs**

ADVANTAGES

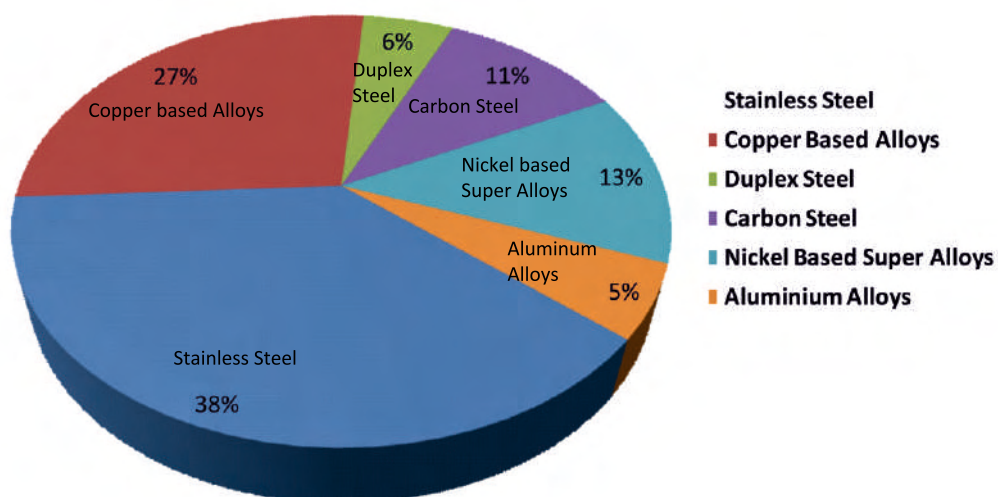
- ◆ **High Production capacity**
- ◆ **Fast Turnaround time**
- ◆ **Consistent quality**
- ◆ **Lesser dependency on skilled labor**

INDUSTRIES SERVED

INDUSTRY WISE



MATERIAL WISE



QUALITY ASSURANCE



CHEMICAL TESTING

In House Spectrometer (Bruker Make) with 24 channels capable of testing
Fe, Ni, Co, AL based material & Nitrogen Content
All Heats are poured and tested on-line on Spectrometer
All the Scrap used is also tested before using
Specimens are stored for particular period

PHYSICAL TESTING

UNIVERSAL TESTING MACHINE



METALLURGICAL MICROSCOPE



HARDNESS TESTING



IMPACT TESTING



MATERIALS POURED

	ASTM	DIN
CARBON STEEL	A216 - WCB	1.0619
	A216 - WCB	
	A352 - LCC	1.1138
	A352 - LCB	
LOW ALLOYS STEELS	A217 - WC1	
	A217 - WC4	
	A217 - WC5	1.7356
	A217 - WC6	1.7379
	A217 - WC9	
	A217 - WC11	1.7363
	A217 - C5	
	A217 - C12	
	A217 - C12A	
MARTENSITIC STEELS	A743 - CA15	1.4008
	A743 - CA40	1.4028
	A743 CA - 6NM	1.4313
HEAT RESISTING STEELS	A297 - HF	1.4825
	A297 - HH	1.4837
	A297 - HI	1.4846
	A297 - HK	1.4848
		1.4749
	A297 - HD	1.4823
AUSTENITIC STAINLESS STEELS	A351 - CF8	1.4308
	A351 - CF8M	1.4408
	A351 - CF3	1.4306
	A351 - CF3M	1.4404/1.4409
	A351 - CF8C	1.4827
	A351 - CF10	1.4308
	A351 - CK20	1.4843
	A351 - CH20	
	A351 - CN7M	1.4500
	A351 - CG8M	1.4431
	A351 - CG3M	

Tolerances :

Tolerances VDG P690 Reference Standard

Nominal Size (mm)	D1 Tolerance (general dimensions)	D2 Tolerance (some functional dimensions)
0 to 6	± 0.15	± 0.12
6 to 10	± 0.18	± 0.14
10 to 18	± 0.22	± 0.17
18 to 30	± 0.26	± 0.20
30 to 50	± 0.40	± 0.31
50 to 80	± 0.45	± 0.37
80 to 120	± 0.55	± 0.44
120 to 180	± 0.80	± 0.65
180 to 250	± 1.20	± 0.95
250 to 315	± 1.30	± 1.10
315 to 400	± 1.80	± 1.40

	ASTM	DIN
AUSTENITIC FERRITE DUPLEX STEELS	A351 - CF3MN	1.4435
	A351 - CD4MCu	
	A351 - CG6MMN	1.3964
	A351 - CK3MCuN	
SUPER DUPLEX STAINLESS STEEL	A890 - GR1A	
	A890 - GR2A	
	A890 - GR3A	
	A890 - GR4A	
	A890 - GR5A	
	A890 - GR6A	
NICKEL BASED SUPER ALLOYS	A494 - M-35-1	
	A494 - M-35-2	
	A494 - M-30-C	2.4365
	A494 - N-12MV	
	A494 - N-7M	
	A494 - CY40	2.4816
	A494 - CW12MW	2.4386
	A494 - CW6M	
	A494 - CW2M	2.4610
	A494 - CW6MC	2.4856
	A494 - CX2MW	2.4602
	A494 - Cu53CuC	2.4858
COBALT BASED ALLOYS	A560 - 50Cr50Ni	
	A560 - 50Cr50Ni-Cb	2.4813
	A560 - 60Cr40Ni	
	STELLITE 3	
	STELLITE 6	
	STELLITE 21	
	STELLITE 31	
	Trib Alloy T 400	

Other Than Above In General We Can Cast Materials As Per Customers Requirements On Request.

Tolerances For Straightness, Flatness, Parallelity, Shape

	Length of the tolerated element		
Precision Class	to 25mm	25 to 50mm	up to 50mm
	allowed difference		
D1	0.15 mm	0.25mm	0.6%
D2	0.10mm	0.20mm	0.4%

Tolerances For Angle Values And Right Angles

	Length of the tolerated element			
Precision Class	to 30mm	30 to 100mm	100 to 200mm	upto 200mm
D1	allowed difference			
minute degree	30	30	30	20
mm/100mm	0.87	0.87	0.87	0.58
D2	allowed difference			
minute degree	30	20	15	15
mm/100mm	0.87	0.58	0.44	0.44

Surface Quality according to ISO R 468, DIN 4769 and VSM 10321

	Ra	Rz	Rt
N9	6.3	23-32	25-38

OUR EXPERTISE

ALUMINUM BRONZE CASTINGS



Be It **AB2 CASTINGS** With, Non-symmetrical Shape, Smaller Parts With Fine Details, Parts That Have Internal Structure, **TIGHT TOLERANCES AND THIN WALLS**, We Do It All. And Due To Regular Pouring Of Ab2 And Other Non-ferrous Castings In High Volume, We Can Even Facilitate Any Sample/ Low Volume Order In Aluminum Bronze Or Other Similar Grades.

We Have Done Ab2 Castings With Components Weighing Of Steam Pressure Valve Components From As Low As **100 GRAM** & Wall Thickness **0.25"** To Impellers & Valve Body As High As **40kgs** & Wall Thickness **8"**.

IMPELLER (CLOSED & OPEN)



The accurate casting and balancing of impellers requires a specialist set of skills as well as a commitment to outstanding consistency and quality.

At first our customers preferred sand casting of impeller but when we offered them unique solution for achieving very high quality casting with no porosity, blow holes, high surface finish and more precise components than sand casting with competitive pricing, they have stuck with ICAST since then.



Size : Large medium or small || **Size** : 60mm diameter to 315mm diameter || **Surface Finish** : A fine finish of around **3.2 microns**.

ICAST operates a very specialized precision casting process and currently supplies high technology impeller and compressor wheels to markets in Europe, Asia, USA and South America

BULKY CASTINGS



We Don't Shy Away From Any Challenge Due To Which Over The Years We Have Become **Expert** In Casting Of Bulky Components With Complex Design And Intricate Shape In **High Volume** . We Have Done **Bulky** Casting In Cast Iron , Wcb, As Well As **Gunmetal** And Very Specific Grades Of Brass With The Castings Weighting Up To **75kgs** And In High Volume . We Meticulously Plan On The Specific Process Which Has To Be Carried Out When We Approach Bulky Castings And Take Time In Sampling Before Going Into Before Going On Full Scale Production.

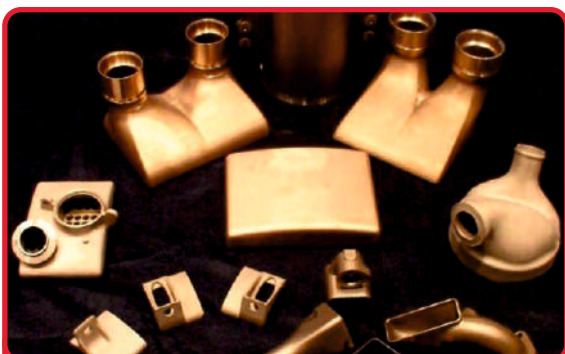
PRODUCT PORTFOLIO



ALUMINUM



ALUMINUM BRONZE



COBALT ALLOYS



STAINLESS STEEL



NICKEL ALLOYS



BRASS



CARBON & LOW ALLOYS



TOOL STEEL

PRODUCT PORTFOLIO



AEROSPACE



VALVE CASTING



AUTOMOTIVE



DEFENCE



FIRE FIGHTING EQUIPMENTS



PUMP CASTING



MEDICAL CASTING

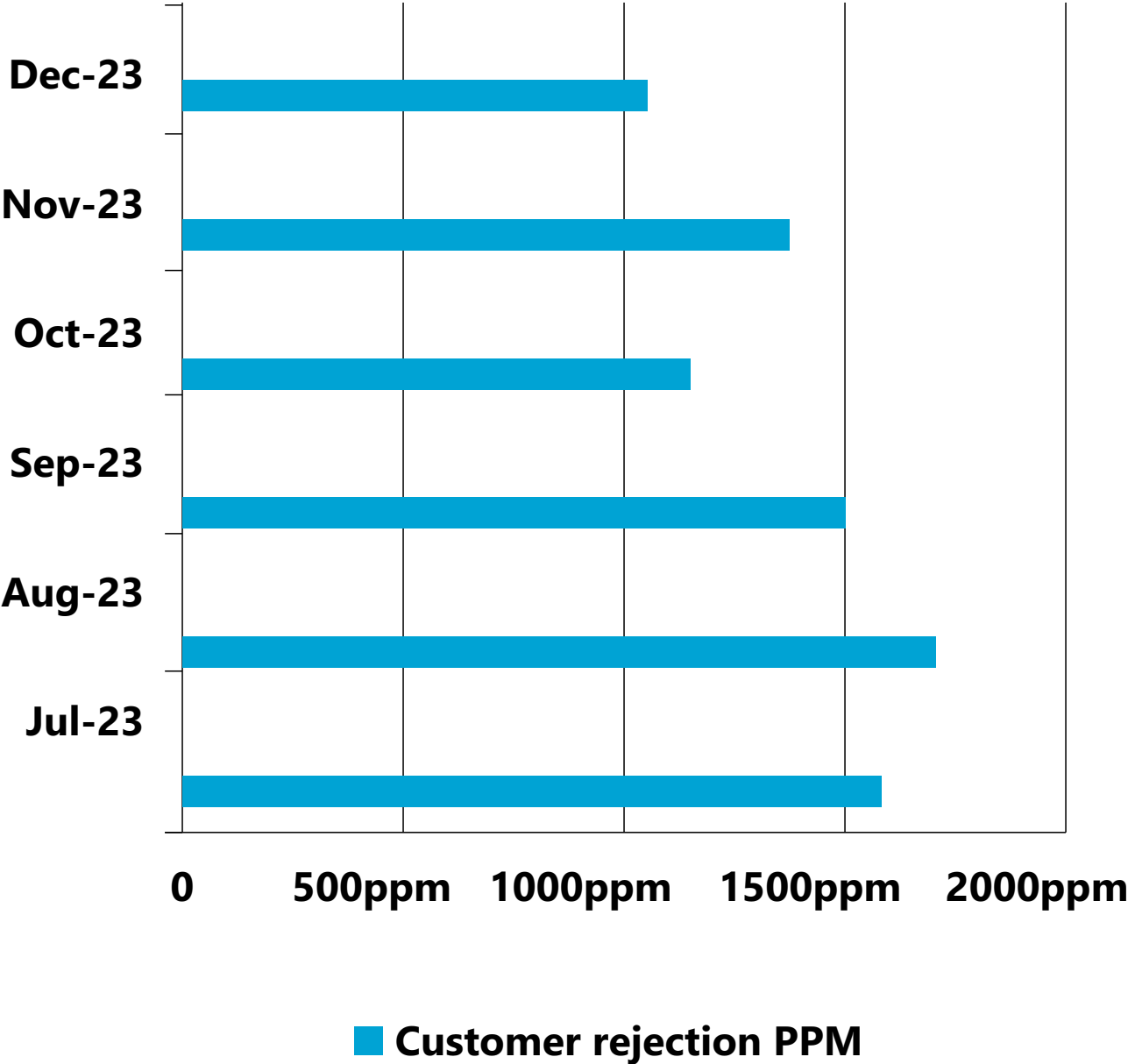


MINING

MAJOR EXPORTS



CUSTOMER REJECTION FEEDBACK (Last 6 Month)



CUSTOMER LIST

North American Customer



European Customer



Oceania Customer



Indian Customer



KIRLOSKAR BROTHERS LIMITED
A Kirloskar Group Company
Established 1888

Enriching Lives



CONTACT US



Time Zone: GMT (+5:30 HRS)



ICAST ALLOYS LLP
FERROUS & NON-FERROUS CASTINGS

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